VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the specification:

(0045) (Currently amended) FIG. 2 the orthopedic support cushion for humans and animals, and, more particularly, domestic pets, is illustrated generally at 10 and may be formed as a generally round body having a outer top cover layer 12 attached to side panels 14 and [36] 38 by a stitched seam 24 and attached to the second covering bottom layer 34 by stitched seam 22. The completed side panel is composed of two panels: first side panel 38 is a panel containing a resealable closure, a the second side panel 14; whereby side panel 38 is attached to side panel 14 by stitched seams 18 and 20 and can be disposed to extend around the perimeter or circumference of the top and bottom panels. It is preferred the cover fabric used for the cover of the cushion of the present invention is soft, comfortable, and hypoallergenic, yet absorbent and also resistant to the adherence of stains and is highly resistant to breakage or tearing in any direction. It is further preferred the resealable closure mechanism 16 be of sufficient length to allow for easy removal of the cover for washing. Lastly it is preferred the cover be made of a fabric that can be conventionally laundered.

(0047) (Currently amended) An inner layer 30 is disposed closely adjacent the second intermediate layer 28. The inner layer 30 is formed from padding material providing support, loft and cushioning to the cushion. A fourth intermediate layer 36 is disposed closely adjacent the inner layer 30 and is formed from a waterproof, breathable, flexible material similar to the material from which the first intermediate layer 26 is formed. Finally a second covering bottom layer 34 is disposed closely adjacent the [third] fourth intermediate layer 36 and is formed from the material which comprises the first cover 12.

(0048) (Currently amended) As previously mentioned a side panel composed of 14 and 38 is seamed to the first covering layer 12 by a stitched seam 24 as well as seamed to the second covering bottom layer 34 by stitched seam 22 and extends around the entire perimeter of cushion 10. The first intermediate layer 26 is sealed closed by sewing, gluing, thermal bonding or the like by seam 32, to fourth intermediate layer 36 forming a complete bond which encloses second intermediate layer 28 and inner layer 30 forming a waterproof barrier and retarding relative movement between said layer 28 and said layer 30.

(0049) (Currently amended) It should be understood by those skilled in the art that the cushion 10 of the present invention may be formed with the first intermediate layer 26 and [third] fourth intermediate layer 36 may be a single sheet folded in half without departing from the sprit and scope of the invention.

VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the claims:

Please amend Claim 16 as follows:

16. (Currently amended) The cushion as recited in claim 1, wherein said waterproof, breathable, and flexible protective liner is sealed closed [by a method such as, but not limited to, sewing, gluing, or thermal bonding] around said padding layer of slow-recovery visco-elastic foam and said supporting padding layer in such a close-fitting and tight manner that the protective liner does not allow for the inner padding layers, of said slow recovery visco-elastic foam and said supporting stabilizing material, to shift or move about within the said protective liner.

Please amend Claim 17 as follows:

17. (Currently amended) The cushion as recited in claim 1 wherein said cushion has numerous overall geometric shape possibilities, [such as but not limited to] as in having a generally square shape, as in having a generally round shape, as in having a generally rectangular shape, as in having a generally semi-circular shape, as in having a generally triangular shape, or as in having a generally pie-shaped shape.

Please amend Claim 20 as follows:

20. (Currently amended) The orthopedic pet cushion as recited in claim [18] 19, wherein said protective liner of breathable, waterproof, MVT material comprises a close-weave fabric of a sufficiently close weave to be waterproof and breathable.

Please amend Claim 21 as follows:

21. (Currently amended) The orthopedic pet cushion as recited in claim [18] 19, wherein said breathable, waterproof, flexible, and MVT membrane material of the protective liner is naturally oleophobic, anti-dust mite, anti-odor, anti-bacterial, anti-stain, and anti-static.

Please amend Claim 22 as follows:

22. (Currently amended) The orthopedic pet cushion as recited in Claim [18] 19, wherein said outer fabric cover is comprised of a top surface, a bottom surface, and peripheral side walls disposed between said top and bottom surfaces.

Please amend Claim 23 as follows:

23. (Currently amended) The orthopedic pet cushion as recited in claim [18] 19, wherein said protective liner of flexible, breathable, waterproof, MVT membrane material is sealed closed, by a method such as but not limited to sewing, gluing, or thermal bonding, around said padding layer of slow-recovery visco-elastic foam and said supporting padding layer, in such a close-fitting and tight manner that the protective liner does not allow for the padding layers, of said slow recovery visco-elastic foam and said supporting padding, to shift or move about within the said protective liner.

Please amend Claim 24 as follows:

24. (Currently amended) The cushion as recited in claim [18] 19 wherein said cushion has numerous overall

l geometric shape possibilities, [such as but not limited to] as in having a generally square shape, as in having a generally round shape, as in having a generally rectangular shape, as in having a generally semi-circular shape, as in having a generally triangular shape, or as in having a generally pie-shaped shape.

Please amend Claim 25 as follows:

25. (Currently amended) The orthopedic pet as recited in claim [18] 19 wherein said cushion may be used by domestic pets or humans.

Please add Claim 26 as follows:

26. (New) Orthopedic memory foam pet cushion, the pet cushion relieves painful arthritic joints, sore muscles and hip dysplasia of older animals and provides preventative care for younger animals, the orthopedic memory foam pet cushion comprising:

(a) a padding layer of slow recovery visco-elastic foam;

(b) a supporting layer, said supporting layer received under said padding layer of slow recovery visco-elastic foam for providing additional cushioning thereunder;

(c) a protective liner of a waterproof, breathable, flexible material, said liner enclosing said padding layer of slow recovery visco-elastic foam and said supporting layer; and

(d) a washable fabric cover, said washable fabric cover enclosing said padding layer of slow recovery visco-elastic foam, said supporting layer and said protective liner.

REMARKS

(0001) The proposed modification of EP 018 and 982 would render the prior art invention unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification and therefore Patent Application 10/822,481 (herein Application 481) it is not an obvious modification.

The Combination Draws Upon Non-Analogous Art References

(0002) It is well settled that in order to combine references properly, each of the references must be relevant to the field of endeavor recited in the claimed invention or problem addressed by the invention. Such is clearly not the case in the cited references. 982 is a Liquid-absorbing pad assembly and method of making same taken from the title. Its primary classification is 428. "The class accommodates certain products of manufacture which are not provided for in classes devoted primarily to manufacturing methods and apparatus. The bulk of documents are directed to stock material composites, that is, material having two or more distinct components which are more ordered than a mere random mixture of ingredients" (USPTO Classification Definitions). The primary purpose and function of this invention 982 is: a pad assembly which absorbs and retains liquid. "The new liquid-absorbing pad assembly of this invention is particularly adapted to be used with patient having urinary incontinence. The pad assembly is also effective in absorbing other liquids as well as blood, in the case of surgical patient; and, the pad assembly serves to keep liquids away from a person's body so as to assure optimum comfort and prevention of bed sores, and the like: (col. 1, lines 30-38) "The pad assemble 20 is particularly adapted for the use with a patient having urinary incontinence, or anyone subject to drainage of body fluids" (col. 2, lines 58-63). Described as being particularly adapted to provide a liquid-absorbing pad assembly usable as a bed pad, chair pad, wheel chair pad. (col. 2, lines 42-45)

(0003) Application 481 is an orthopedic pet cushion/bed. Its preliminary classification is 119 – Animal Husbandry. " This class provides for methods or apparatus for the propagation, rearing, training, exercising, amusing, feeding, milking, grooming, housing, controlling, handling, or general care of a living animal unless provided for elsewhere" (USPTO Classification Definitions). The present invention Application 481 is related in general to a pet cushion and more particularly but not by way of limitation, to a pet cushion of orthopedic slow recovery visco-elastic foam providing orthopedic support, with a protective liner of a waterproof, breathable, flexile material enclosing the visco-elastic foam padding and the supporting layer while protecting the padding materials from liquids of all nature yet allowing for airflow and brethablility of the padding layers it serves to enclose (Background of the Invention, paragraph 2).

(0004) The primary purpose of this invention is a cushion providing orthopedic support for a pet using a padding layer of slow recovery visco-elastic foam (28) combined with a supporting padding layer (30), and to prevent the absorption of liquids into the porous foam and supporting layer by using a protective waterproof, breathable, flexible liner 26, 36 totally enclosing both the slow recovery visco-elastic foam and the supporting layer. Yet this waterproof, breathable, flexible liner allows for airflow to pass through the liner maintaining the loft of the cushion (paragraphs 0002, 0008, 0025, 0030).

(0005) This waterproof, breathable, flexible liner 26, 36 of Application 481 is a liner made from a single layer of material having waterproof, breathable, flexible characteristics. 982 teaches a pad which is composed of several layers of laminated materials and not a single layer of fabric but a self described top layer 21, 'multipurpose structure' 24 along with an absorbent layer 23, and a bottom waterproof layer 22. It is further the purpose and function of the waterproof, breathable, flexible liner of invention Application 481, not to allow the absorption of any liquids in the orthopedic pet cushion 10. Absorption of liquids would destroy the slow recovery visco-elastic foam 28 and supporting layer 30 while creating an unsanitary environment for the user of the cushion.

(0006) Should the liquid-absorbing pad of 982 be used for the waterproof, breathable, flexible liner 26, 36 of Application 481 or the covers 12a, 14a, 22a, 24a of EP018, the liquid absorbing pad 982 would absorb liquids. Furthermore it would not allow for breathablility of the airflow through the liquid-absorbing pad as taught by Application 481. 982 allows for drying. Drying is allowing the air to come in contact with liquids in order to evaporate. Drying is not the same as breathing. Breathing is the ability of air to pass from one side of the liner to another and then back out again. Breathing allows the air to go both ways through the liner. The bottom waterproof layer 22 of 982 would prevent airflow in both directions through the liquid-absorbing pad assembly and is therefore not breathable.

(0007) The purpose of Application 481 is clearly opposite in function from 982. They address different and non-analogous problems. The reference 982 sited does not come from analogous art, and therefore is not within the 'scope and content of the prior art" as required by U.S.C, Title 35, Sec. 103(a).

(0008) A reference is considered analogous, and, therefore available for use in an obviousness rejection if it is either within the field of the inventor's endeavor (982 is not) or, reasonably pertinent to the particular problem with which the inventor was involved (*In re Deminski,* 796 F.2d 436 (Fed. Div. 1986).) Again 982 does not pertain to the particular problem solved by Application 481.

(0009) While the PTO classification of references and cross-references are some evidence of *nonanalogy* or *analogy,* the important factors to consider are the similarities and differences in structure and function of the inventions. (*In re Ellis,* 476 F.2d 1370 (C.C.P.A. 1978).)

The References Do Not Fully Teach the Claimed Combination

(0010) Even if the references were within the proper field of endeavor, an assertion which is strenuously traversed, the combined teaching of the cited references still fail to fully teach the invention recited herein.

(0011) The prior art references must teach or suggest all of Application 481 claim limitations. As with any U.S.C., Title 35, Sec. 102 rejection, Application 481 includes elements not found in the combination of EP018 and 982. The claim language of Application 481 distinguishes the combination and can show why the undisclosed features, in combination with the rest of the claimed features, are significant in achieving the benefits of the invention.

(0012) First, Application 481 specifically claims an orthopedic cushion for a pet comprising: a padding layer of slow recovery visco-elastic foam 28 (claims 1a and claim 19a). Manufactured by an exclusive process, slow recovery visco-elastic foam is a unique and separate category of foam having characteristics different than all other types of foam. (paragraph 5). It is a foam like no other foam. Application 481 specifically and only claims slow recovery visco-elastic foam for the padding layer 28. Both 982 and EP018 are silent in regards to slow recovery visco-elastic foam.

(0013) Second, Application 481 claims a protective liner of a waterproof, breathable, flexible material, enclosing both the said padding material of visco-elastic foam and said supporting material (Claims 1c, and 19c). EP018 is silent about the covers 12a, 14a, 22a, 24a being waterproof, breathable, and flexible. 982 claims 'a suspension which allows air to freely associate with the underside of said top layer for drying purposes" (Claims 1, 8, 20, 28, and 29). 982 does not claim to be breathable nor flexible.

(0014) EP 018 teaches 'superstratum contains a fill 12b of such material at such density, as will make the superstratum 12 highly compressible and easily pliable. Example of such material are Hollofil™ (commercially available from Dupont Chemical Company; Holofil™ is a registered trademark of that company) or a similar polyester batting, and goose or duck down. Alternatively, polystyrene beads may be used either alone or in combination with another suitable material. The fill 12b is relatively loosely packed, so that the superstratum 12 is suitable compressible and pliable, and its shape can be rearranged to some degree" (column 4 lines 17-28). There is no mention of a foam material, and specifically no mention of slow recovery visco-elastic foam.
Slow recovery visco-elastic foam is an unlike, and a completely different, substance with different characteristics than Hollifil ™ polyester batting, goose or duck down, or polystyrene beads. Furthermore, slow recovery visco-elastic foam would not fit EP018 teaching of being 'loosely packed" nor would slow recovery visco-elastic foam be able to be 'rearranged to some degree".

(0015) EP018 discusses at great length the 'bedding-down' or 'nesting' instinct (column 1 lines 1-58, and column 2 lines 1-19). The property of being 'rearranged to some degree" (column 4 line 28), 'sufficiently pliable and fluid (column 3 line 4), 'comprising preferably a relative loosely-packed cavity containing a highly compressible, moveable amorphous material (such as loosely-packed down, polyester batting or small polystyrene beads) or a combination of such materials" (column 3 lines 18-22), "constructed such that the animal in preparing to lie on it can and normally will disturb its shape by moving loosely packed fill from one part of the superstratum to another (Page 1 #57 description) all clearly teach the fill must be movable and rearrangable into another shape. This is impossible with slow recovery visco-elastic foam. Although pliable, it always reverts back to the original shape and in no way can be moved and rearranged into another new shape.

(0016) Secondly, Application 481 claims " a protective liner of a waterproof, breathable, flexible material, enclosing both the said padding material of visco-elastic foam 28 and said supporting padding material 30: (Claim 1c , Claims 5-13, Claim 19c, Claims 20-21). EP018 is silent regarding the liner being waterproof, breathable, flexible material and cover being washable fabric.

(0017) 982 is silent in regards to being 'breathable" or "flexible". 982 claims 'a suspension which allows air to freely associate with the underside of said top layer for drying purposes" (Claims 1, 8, 20, 28, and 29). As discussed earlier, drying is allowing the air to come in contact with liquid in order to evaporate. Drying is not the same as breathing. Breathing is the ability of air to pass from one side of the liner to another and then back out again. Breathing allows the air to go both ways through the liner. The bottom waterproof layer 22 of 982 would prevent airflow in both directions through the liquid-absorbing pad assembly and is therefore not breathable.

(0018) 982 claims a completely different 'structure' which has drying characteristics – "a multiple-purpose structure disposed between the said absorbent layer and said top layer, said structure providing cushioning, means enabling immediate passage therethrough of liquid from said top lays, means substantially preventing reverse wicking of liquid that has passed through said structure, and a suspension which allows air to freely associate with the underside of said top layer from drying proposes" (claims 1, 8, 20, 28, 29). This is a 'structure' not a liner, nor a single layer of material, nor a cover. Furthermore, the purpose of this structure is to provide cushioning, immediate passage of liquid, preventing reverse wicking, and providing a suspension to allow drying. The function of this 'multiple-purpose structure" is completely different than the single layer liner 26, 36 which is waterproof, breathable, and flexible as claimed in Application 481. Application 481 does not claim, nor desire, that the liner function to cushion, enable the immediate passage of liquid, or prevent reverse wicking as in 982. They are not interchangeable.

(0019) The component for "drying" in 982 which is "a multiple-purpose structure 24 disposed between the absorbent layer 23 and the top layer 21, This structure 24 has four functions: (1) providing cushioning, (2) means enabling immediate passage therethrough of liquid from the top layer, (3) means substantially preventing reverse wicking of the liquid that has passed through the structure, (4) and a suspension which allows air to freely associate with the underside of said top layer for drying purposes" (Abstract). The waterproof layer 22 of 982, and multiple-purpose structure 24 of 982 are two distinct layers performing two distinct functions and are not interchangeable. Application 481 teaches a single layer liner that is all of waterproof, breathable, and flexible.

(0020) Furthermore in 982, the waterproof bottom layer 22 and the structure for cushioning, immediate passage of liquid, preventing reverse wicking, and suspension for drying 24 is separated by absorbent layer 23, and also has a top layer 21 creating a laminated pad of several layers. Application 481 teaches a liner of a top liner 26, and a bottom liner 36 composed of a single layer material which is sealed closed 23. A single layer material used for this liner achieves the waterproof, breathable and flexible characteristics of this single layer material from a coating, a laminate, or fabrication.

(0021) It is not obvious to one having ordinary skill in the art at the time the invention was made to manufacture the first and second single layer covers (claim 2) or the outer casing (claim 3) of EP018 out of a waterproof, breathable, flexible material since such a material forming a single layer cover or casing was not specifically taught by 982. It is further not obvious to one having the ordinary skill in the art at the time the invention was made to manufacture the waterproof bottom layer 22 of 982 into a cover which totally enclosing the superstratum and base layer of EP018 since 982 only claims a bottom waterproof layer with is not breathable.

(0022) 982 specifically teaches that 'the stitches 26 do not extend through and hence do not puncture the bottom layer 22 whereby the liquid impervious integrity of the pad 20 is assured" (col.3 lines 33-36). It is only by puncturing the bottom waterproof layer could air pass through the entire liquid-absorbing pad assembly making it breathable. This is counter to the teaching of 982.

(0023) Since 982 does not claim the liquid-absorbing pad assembly to be "breathable". Adding the characteristic of 'breathable' to the liquid absorbing pad assembly of 982 would be adding a new and material characteristic of significance to the claims, after the fact, with is unallowable.

(0024) 982 does not claim to be "flexible" and it is unclear if the liquid-absorbing pad assembly in 982 is flexible. Since it contains several laminated layers, with one being reticulated (col.3 line 13), another having a predetermined thickness 28, 28a, and overall thickness 20, 20a (col. 3 lines 27-32 and col.6 lines 11-13) the combination of numerous layers, (top layer 21, multi-purpose structure 24, absorbent layer 23, and bottom waterproof layer 22) would make the entire liquid-absorbing pad assembly of 982 less flexible than a single layer of material as taught in the liner 26, 36 of Application 481.

(0025) Application 481 teaches the liner 26, 36 enclosing both the visco-elastic padding layer 28 and the supporting padding layer 30, to be all of waterproof, breathable, and flexible. The breathable nature of liner in Application 481 functions to maintain the loft of the slow-recovery visco elastic foam padding layer 28 and the supporting padding layer 30 by allowing airflow through the liner and is important to the function of the Orthopedic Pet Bed (paragraphs 0002, 0008, 0025, and 0030). The flexibility of the liner material is important for the comfort of the cushion user. Thus the liner is claimed to be waterproof, breathable, and flexible (claims 1, 5,6,7,8,9,10,11,12,13,16,19-23) is unlike either EP018 or 982 and therefore nonobvious.

(0026) In addition, Fig. 7 and Fig. 8 of 982 deal with the dissipation of liquid. The nonwoven fibrous mat serves to dissipate liquid radically from any local introduction point thereon throughout a substantial region or portion of it volume. (col. 6 lines 23-28). The pad assembly serves to keep liquids away from a person's body so as to assure optimum comfort and prevention of bed sores, and the like: (col. 1, lines 30-37). Application 481 does not desire the liner 26, 36 to absorb liquid. Application 481 claims only to be waterproof and block any absorption of liquid into the padding layer of visco-elastic foam 28 or the supporting padding layer 30. Application 481 makes no teaching of dissipation of liquid radically from any local introduction point, nor the retention of liquid. As such, in Application 481 "the liquids would NOT be kept away from the user's body as to assure optimum comfort and prevention of bed sores and the like" an important function as taught by 982.

(0027) Application 481 contains elements not shown in references EP018 or 982. These elements are separate structural elements and a novel relationship among other elements of the claim. To the extent that rejected claims 1-25 of Application 481 includes elements not found in the combination, and the claim language of Application 481 distinguishes the combination; these undisclosed features of Application 481 in combination with the rest of the claimed features, are significant in achieving the benefits of the invention.

(0028) In order for it to be obvious, there must also be a reasonable expectation, at the time of the invention, that the modification or combination of the prior art references will be successful (*Ex part Erlich,* 3 UPSQ2d 1011 (Bed. Pat. App & Inter. 1996).)

The References Lack Suggestion to Combine

(0029) Of course, even if the references were from the proper field of endeavor, and fully taught the invention herein, there still must be some affirmative teaching in the references to make the cited combination. Such suggestion is asserted to be lacking in their references cited against the present claims.

(0030) 982 teaches a liquid absorbing pad assembly, EP018 teaches a dual layered cushion for pets, Application 481 teaches an orthopedic pet cushion which has a waterproof, breathable flexible liner. Neither Application 481 nor EP018 (both pet cushions) would not want to absorb and retain liquids as taught by 982 since it would ultimately render the pet cushion un-usable for its intended purpose should either Application 481 or EP018 absorb and retain liquids. Futhermore, it is counter intuitive to use a liquid absorbing pad to function as a waterproof, breathable, flexible liner for a pet cushion as taught in Application 481.

(0031) Nothing in the references would suggest the combination. If the references are not each directed toward solving the same problem to which the invention is also directed, then the rejection should be withdrawn. This requires more than an allegation that the level of skill in the art is high. (*In re Rouffet,* 149 F.3d 1350 (Fed. Cir. 1998).)

(0032) Furthermore, 982 teaches away from Application 481. 982 functions as a liquid-absorbing (and retaining) pad assembly while Application 481 claims a waterproof breathable, flexible liner 26, 36 whose purpose is to prevent liquid absorption and liquid retention into the orthopedic pet cushion.

(0033) 982 teaches a waterproof bottom layer 22. EP018 claims a 'cushion 10 comprises an upper layer or supertratum 12 and a lower or base layer 14. In the version shown in Fig 1A, each of these layers is encased in its own cover' (col. 4 lines 12-15). Application 481 teaches a waterproof, breathable flexible liner 24, 36 covering both the visco-elastic padding layer 28 and the supporting padding layer 30.
The liquid-absorbing function of 982 would negate the waterproof breathable, flexible function of liner 26, 36 of Application 481.

(0034) Should the entire structure of the Liquid-absorbing pad assembly of 982 be used as the liner for Application 481, or the covers of EP018, there would be two unexpected and undesirable results.

(0035) First, the liquid-absorbing pad assembly would absorb any liquids that come in contact with the liquid-absorbing pad. An undesirable and unwanted result. The purpose of the waterproof, breathable, and flexible liner of Application 481 is to prevent liquid absorption into the padding layer of visco-elastic foam and supporting padding layers. Since both Application 481 and EP018 have an outer cover which would enclose the liquid-absorbing pad, these covers would serve to inhibit air from coming in contact with the drying structure 24 of 982 causing the inability to dry, or at the very least increasing the time required to dry. Both would create an unsanitary condition. 982 does not teach a separate cover enclosing the entire liquid-absorbing pad assembly since it would impede drying.

(0036) Second, the purpose of the waterproof, breathable, flexible liner 26, 36 of Application 481 is to prevent liquids from passing through the liner into the foam, AND to allow air to pass through the liner to maintain the loft of the visco-elastic foam and supporting padding layer (paragraphs 0002, 0008, 0025, and 0030). The waterproof bottom layer 22 of 982 would prevent liquid from passing entirely through the liquid-absorbing pad assembly; however, the drying structure 24 would be above the waterproof bottom layer 22 and the suspension which allows air to freely associate with the underside of top layer 21 for drying purposes of 982. Therefore the multi-purpose structure 24 would not create 'breathability' through the bottom waterproof layer 22 into the visco-elastic foam and the supporting layer of Application 481 or the dual cushions of EP018. The drying structure 24 of 982 would be "drying" in the other direction towards the top layer 21.

(0037) A contrary teaching may be explicit or implicit in the structure or purpose of one of the references. The proposed combination, for the examples shown above, would disrupt the operation of the structure of one of the references or obstruct its intended result.

(0038) The waterproof, breathable, flexible liner 26, 36 of Application 481 is a single layer of material. The waterproof, breathable qualities of single layer material comprising the liner 26, 36 are achieved by coating or laminating a single layer material, or fabricating from a microfiber of sufficiently close weave to be waterproof and breathable, or a monolithic membrane (claims 5-12).

(0039) In 982, not only does it teach a multi-layered laminate pad assembly, it uses an adhesive 40a to join layer 21 to layer 24a, layer 24a to layer 23a, and layer 23a to layer 35a (Figure 9). This significance of this is: should an adhesive 40a be used on the type of waterproof, breathable, flexible liner 26, 36 of Application 481, the adhesive would destroy the breathabilty of the coating, the laminate, or the fabrication by obstructing and interfering with the airways that allow for breathability. Should an adhesive be used on any of these processes which create "breathability" in a material, the adhesive would infuse into all the airways of the material thereby obstructing the airways preventing all airflow. 982 teaches that 'various layers 21A, 22A, and 23A and structure 24A are lightly compressed with adhesive 40A. (col. 7 lines 47-48). Any compression, however light, would only serve to further saturate and plug the airways by pushing the adhesive into the airways preventing breathablility.

(0040) EP018 also teaches away from Application 481. In fact, EP018 discusses the disadvantages of using foam in the invention. "There are two main types of cushion for pets in existence. The first, similar in many respects to mattresses for human use, consist chiefly of a layer of polyurethane foam of varying thicknesses and degrees of compressibility, covered with a layer of fabric" (column 2 lines 33-38). EP018 then goes on to teach " The disadvantage of such a cushion, however, is that the single uninterrupted layer structure does not accommodate the instinctive behavior of the dog to dig at and rearrange the bedding before settling in the curled-up sleeping position" (column 2 lines 48-52). By using the terminology of 'uninterrupted layer' and 'rearrange", EP018 clearly implies that material used in the superstratum must be movable and rearrangable -- thereby ruling out slow recovery visco-elastic foam since like polyurethane foam it is neither. EP018 thereby teaches away from Application 481.

(0041) A reference teaches away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference or would be led in a direction divergent from the path that was taken by the applicant. (*In re Gurley,* 27 F.3d 551 (Fed. Cir. 1994).)

Secondary Considerations Making Application 481 Nonobvious

Unexpected results.

(0042) Unexpected results are present. Application 481 shows an additive result where a diminished result would have been expected based on the combination of the prior art.

(0043) EP018 addresses the nesting behavior of dogs by allowing the animal to displace the loosely packed fill creating a 'nest'. 982 is a self described liquid-absorbing pad assembly with a waterproof bottom layer 22. Combining these prior art examples would create the diminished result of absorbing liquid into the dual layered cushion for pets, suspending such liquid, while the bottom waterproof layer 22 taught in 982 would prevent the liquid from passing out of the bottom of dual layered cushion. Application 481 shows the additive result of a waterproof, breathable, flexible liner preventing liquid absorption into the porous foam and padding layers thereby totally protecting the pad -- avoiding permanent damage or creating an unsanitary condition.

(0044) Application 481 lacks a property that EP018 would have expected to process based the teachings of the prior art. Should the animal be able to 'disturb the shape" (EP018 claim 1) of the padding layer of slow recovery visco-elastic foam 28 (application 481 claims 1a and 19a) by the means of stepping, pawing etc. it would in essence destroy the padding layer of slow recovery visco-elastic foam 28 of Application 481 rendering the slow recovery visco-elastic foam layer useless and unable to provide the orthopedic characteristics essential to Application 481.

(0045) These unexpected results provides evidence that Application 481 is non obvious.

Commercial Success.

(0046) Application 481 is highly sought after, since it is something new and should be considered nonobvious. The claimed features of orthopedic slow recovery visco-elastic foam protected by a waterproof, breathable flexible liner are responsible for the commercial success of the invention of Application 481. The evidence of commercial success is clearly attributed to the design. This design is new and nonobvious.

Long-felt Need and Failure of Others to Provide

(0047) The art of application 481 recognized that several problems that existed for a long period of time without a solution. First, there is a long felt and persistent need for orthopedic pet cushions especially for older animals suffering from arthritis, sore muscles, joint problems, and hip dysplasia. Often an 'egg-crate' style of foam was used to attempt to provide support and cushioning. This egg-crate foam did not alleviate pressure points as true orthopedic foam must. Slow recovery visco-elastic foam does relieve the pressure points thereby providing true orthopedic benefits to the animal.

(0048) Second, this long-felt need was not satisfied by others since none of the orthopedic slow recovery visco-elastic pet beds available on the market protected the visco-elastic foam from liquids, odors, both major problems clearly present with pet cushions.

Protected by only a removable washable fabric cover, within as short period of time, the visco-elastic foam would be destroyed requiring the expensive replacement of the pet cushion. Protected by only these removable washable covers, the visco-elastic foam still would absorb liquids and odors. Application 481 takes the novel step that no other had done, protecting the slow recovery visco-elastic foam with a waterproof, breathable, flexible liner. This liner provided the required protection and offered a sanitary environment for the pet cushion user as well as the human owner's home. The breathable liner maintains the loft of the visco-elastic foam and the supporting padding layer.

(0049) It should be noted that the date of publication for EP018 was February 11, 1994. The date of publication for 982 was October 9, 1990. Should it have been obvious to one having ordinary skill in the art at the time of the invention was made to manufacture the liner of EP018 out of a waterproof breathable, flexible material, since it has been held to be within the general skill of a worker in the art to select a know material on the basis of its suitability for the indeed us as a matter of obvious choice, the individual would have had 11-14 years to do so. No one has done it.

(0050) Thirdly, Application 481 finally satisfied the long felt need of combining the effective orthopedic visco-elastic foam with a protective waterproof, breathable, flexible liner.

(0051) Visco-elastic foam provides the necessary orthopedic relief to the animal unavailable with other padding materials such as polyurethane foam. This is due to the unique characteristic of slow recovery visco-elastic foam ability to prevent pressure points. However, visco-elastic foam like any foam is porous and will absorb liquids and odors. This unique solution of Application 481 solved the long-felt need of protecting the visco-elastic foam while prolonging the life of the cushion and providing a sanitary environment.

To Specifically Address All Issues of Office Action

(0052) 1. Amendments have been made to paragraphs (0045), (0047), (0048), (0049) of the Detailed Description of the Preferred Embodiment to correctly reference character "34" and reference character "36". No amendments have been made to the drawings of Application 481 since the with the corrections, to the above mentioned paragraphs, the reference character "34" and reference character "36" should be correct within the drawings.

(0053) 2. Recites second paragraph of 35 U.S.C 112.

(0054) 3. Claims 16, 17, and 24 are amended in the first section of this Amendment.

(0055) 4. Claims 22-25 are corrected in the first section of this Amendment Response. The applicant respectfully thanks the Examiner for pointing out this error.

(0056) 5. Recites 35 U.S.C 103(a).

(0057) 6. Response to rejection of Claims 1-25.

(0058) Claims 1 & 19, EP018 teaches a cushion for domestic pets comprising:

(a) A padding layer 14b and 24b of slow recovery visco-elastic foam (col.4 lines 29-38).

(0059) Response: EP018 does not teach slow recovery visco-elastic foam as specifically taught in Application 418. Turning to the Detailed Description of the Preferred Embodiments of EP018, if one looks at the drawing of the preferred embodiments of Figs 1A and 1B, it will be noticed the 14b and 24b are the lower or base layers. Application 481 specifies that the slow recovery visco-elastic foam be the top padding layer 28. In Application 481 the bottom supporting layer 30 is formed from padding materials providing support, loft and cushioning to the cushion.

Supporting layer 30 rests below the top padding layer 28 of slow recovery visco-elastic foam. Supporting layer 30 of Application 481 would correspond to EP018 14b and 24b. The preferred embodiment of Application 481 shows the slow recover visco-elastic foam at the top of the orthopedic pet cushion not the bottom as in EP018. This is not reversible since the slow recovery visco-elastic foam being easily compressed would not be: "densely packed (or otherwise filled) with a material 14b which is preferably only somewhat compressible. Examples of suitable material are cotton batting and kapok. This layer 14 is packed (or otherwise filled) sufficiently densely to give it a distinct form and shape and make it feel firm to the touch. While the base layer 14 can be compressed with moderate pressure of the hand, such pressure will not permanently change the shape of the base layer in this preferred embodiment" (col.4 lines 29-38) as taught in EP018. The padding layer of slow recovery visco-elastic foam 28 of Application 481 does not fulfill the teaching of 14b and 24b of the preferred embodiment of EP018.

(0060) (b) a supporting padding layer 12b, 22b of a stabilizing material which support the visco-elastic foam and provides additional cushioning, adjacent to said cushion of slow recovery visco-elastic foam.

(0061) Response: Again, in examining the Preferred Embodiment of EP018, layers 12b and 22b are at the top of the cushion and 'each of these layers is encased in its own cover 12a" (col.4 lines 14-15). Application 481 Preferred Embodiment shows the stabilizing supporting layer 30 to be at the bottom of the orthopedic pet cushion. Application 481 does not teach that each layer 28 and layer 30 be encased in its own cover and therefore distinguishable from EP018.

(0062) (c) a protective liner 12a, 14a, 22a, 24a of a waterproof, breathable, flexible material enclosing both the said padding material of visco-elastic foam, said supporting material (col. 4, lines 50-55).

(0063) Response: EP018 teaches "each of these layer is encased in its own cover 12a" (col. 4 lines 14-15), and "In the base layer 14, thus, the density of the packing of fill 14b cooperates with the cover 14a to maintain the shape of the base layer" (col. 4, lines 39-41), and "in superstratum 12, in contrast, the shape is maintained only by the outer covering 12a" (col. 4, lines 41-43). Application 481 differs from the teachings of EP018 in two distinguishable elements. First EP018 requires that each layer 12 and 14, or 22 and 24 - EACH have their own covers. Application 481 provides one cover alone that is the "protective liner of a waterproof, breathable flexible material, enclosing both the said padding material of visco-elastic foam and said supporting padding material" (claims 1c and 19c). Secondly, the purposes of the covers of EP018 differ in function from the liner of Application 481. As stated earlier, the purpose and function of the covers in EP018 is to maintain the shape of each layer 12 and 14, or 22 and 24. Application 481 does not depend on the liner to maintain the shape of either the padding layer of slow recovery visco-elastic foam 28 or the supporting padding layer 30. The function of the liner in Application 481 is to provide a waterproof barrier, yet the liner can breath to maintain the loft of the cushion, while being flexible for the comfort of the cushion user. The function of covers 12a and 14a, or 22a, and 24a of EP018 are distinguishable from the liner 26 and 36 of Application 481.

(0064) (d) a washable fabric cover 12, 14, 22, and 24 totally enclosing said padding material of slow recovery visco-elastic foam, said supporting padding material and said protective liner.

(0065) Response: The washable fabric cover is not unique to either EP018 or Application 481. A claim for a washable fabric cover is frequently made in most pet cushions.

Furthermore, as the Examiner points out, EP018 is silent about the liner being waterproof, breathable, flexible material and the cover being a washable fabric.

(0066) 982 teaches a cushion in which the liner 35, 35a, 36, and 36a being waterproof, breathable flexible material/moisture vapor transmission and the cover 21, 21a being washable fabric. It would not be obvious to one having ordinary skill in the art at the time of the invention was made to manufacturer the covers (since EP018 does not teach a liner) of EP018 out of a waterproof, breathable, flexible material as taught by 982.

(0067) **Response:** The reasons this would not be obvious are discussed in the sections: The Combination Draws Upon Non-Analogous Art References; The References Do Not Fully Teach the Claimed Combination; The References Lack Suggestion to Combine; and lastly Secondary Considerations Making Application 481 Nonobvious.

(0068) In addition, it would have been obvious to one having the ordinary skill in the art at the time the invention was made to manufacture the cover of EP018 out of a washable fabric as taught by 982.

(0069) **Response**: The washable fabric cover is not unique to either EP018, 982 or Application 481. The claim for a washable fabric cover is frequently made in most pet cushions. This is a common and frequent claim within classification 119.

(0070) For claim 2, EP018 as modified by 982 (emphasis on EP018) further teaches wherein the supporting padding layer is comprised of a textile-based material (col.4, lines 15-28).

(0071) Response: Using a textile based material is not unique to EP018, but rather a frequent claim of pet beds in classification 119. Col. 4, lines 15-28 deals with the superstratum 12, 22 of EP018 which would correspond to the slow recovery visco-elastic foam 28 of Application 481. Slow recovery visco-elastic foam is not a textile-based material

(0072) For claims 3 & 4, it would have been obvious to one having ordinary skill in the art at the time the invention was made to manufacture the supporting padding layer of EP018 as modified by 982 out of foam or rubber material.

(0073) Response: EP018 or Application 481 is not unique in claiming foam or rubber material in a pet cushion within classification 119.

(0074) For claims 5 & 6, in addition to the above, 982 teaches the waterproof, breathable, and flexible protective liner material comprises a hydrophilic laminate/coating (col.9, lines 1-11). It would have been obvious to one having ordinary skill in the art at the time the invention was made to laminate the protective liner of EP018 as modified by 982 with a hydrophilic laminate/coating as further taught by 982 in order to assure rapid dissipation or liquid (see 982, col. 9, lines 1-11).

(0075) For claims 7 & 8, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the liner of EP018 as modified by 982 with a micoporous laminate/coating.

(0076) For claims 9 & 10, it would have been obvious to one having ordinary skill in the art at the time the invention was made to laminate the liner of EP018 as modified by 982 with a bi-component laminate/coating.

(0077) For claim 11, it would have been obvious to one having ordinary skill in the art at the time the invention was made to manufacture the liner material of EP018 as modified by 982 out a material fabricated from a microfiber of a close weave to be waterproof and breathable.

(0078) For claim 12, it would have been obvious to one having ordinary skill in the art at the time the invention was made to manufacture the liner material of EP018 as modified by 982 out of a material fabricated with a monolithic membrane.

(0079) **Response**: The main function of EP018 is to provide a dual-layered cushion for the use by an animal, which accommodate the animal's bedding-down behavioral pattern (description paragraph 57-front page). Since EP018 is not concerned with the waterproof, breathable, flexible functions of a protective liner, EP018 does not teach a single liner enclosing both the superstratum 12 and the base layer 14, but rather separate covers 14a, 24a for each layer of superstratum and base layer. This is necessary since the superstratum "the shape is maintained only by the outer cover 12a" (col. 4 lines 41-43). EP018 teaches two separate covers constructed separately and then attached together. The function of the covers of EP018 is to maintain shape, separate the layers of superstratum and base layer, and serve as a means of attachment. The function of the liner 26, 36 of Application 481 is for protection and encasing both the layers, padding layer of slow recovery visco-elastic foam 28 and supporting layer 30, with a single layer liner without separating the padding layer 28 or supporting layer 30. The functions of the covers of EP018 and the protective liner of Application 481 are different. Should these covers of EP018 be made of the liquid-absorbing pad assembly taught by 982, it would not be obvious to use a hydrophilic laminate/coating, micoporous laminate/coating, bi-component laminate/coating, material fabricated from a microfiber of a close weave to be waterproof and breathable, or a monolithic membrane to create a waterproof material. 982 teaches the waterproof layer comprises a polymeric sheet portion (claim 16) or the polymeric sheet portion is made of rubber (claim 17).

A polymeric material or a rubber material is by nature waterproof and would have no need of a hydrophilic laminate/coating, micoporous laminate/coating, bi-component laminate/coating, material fabricated from a microfiber of a close weave to be waterproof and breathable, or a monolithic membrane to create a waterproof material. Neither the polymeric material nor the rubber material is breathable. Even if the polymeric material or the rubber material of 982 was modified with a hydrophilic laminate/coating, micoporous laminate/coating, bi-component laminate/coating, material fabricated from a microfiber of a close weave to be waterproof and breathable, or a monolithic membrane it would not make either the polymeric material or rubber material breathable. Modification of applying a hydrophilic laminate/coating, micoporous laminate/coating, bi-component laminate/coating, material fabricated from a microfiber of a close weave to be waterproof and breathable, or a monolithic membrane to 982 would not make the liner breathable as taught by Application 481.

(0080) For claims 13 & 21, in addition to the above, 982 teaches the liner material is naturally oleophobic, anti-dust mite, anti-bacterial, anti-stain, and anti-static (col. 9 lines 1-11).

(0081) **Response:** 982 teaches only an antimicrobial finish. 982 is silent about being oleophobic, anti-dust mite, anti-bacterial, anti-stain, and antistatic as taught in Application 481. Application 481 does not claim antimicrobial. 982 achieves it's anti-microbial property by adding a specific finish such as SLYGARD 5700 or SYLGARD 5701 (col. 9, lines 16-20). Application 481 teaches that the waterproof, breathable, flexible liner material is naturally oleophobic, anti-dust mite, anti-bacterial, anti-stain, and antistatic.

(0082) For claim 14, EP018 as modified by 982 (emphasis on EP018) further teaches wherein said out fabric cover has a releasable closure so that said fabric cover may be removed from the said padding of slow recovery visco-elastic foam, said padding of stabilizing support material, and said protective liner for washing (col. 5 lines 22-33).

(0083) Response: In classification 119, removable fabric covers, that are removable for washing, is a common claim. Removable fabric covers are not unique to either EP018 or Application 481.

(0084) For claims 15 & 22, EP018 as modified by 982 (emphasis on EP018) further teaches wherein said out fabric cover is comprised of a top surface, a bottom surface, and peripheral side walls disposed between said top and bottom surfaces (see drawings of EP018).

(0085) Response: In classification 199, an outer fabric cover comprised of a top surface, a bottom surface, and peripheral side walls is common and not unique to either EP018 or Application 481.

(0086) For claims 16 & 23, EP018 as modified by 982 (emphasis on EP018) further teaches wherein said waterproof, breathable, and flexible protective liner is sealed by a method such as, but not limited to, sewing, gluing, or thermal bonding around said padding layer of slow-recovery visco-elastic foam and said supporting padding layer in such a close-fitting and tight manner that the protective liner does not allow for the inner padding layers, of said slow recovery visco-elastic foam and said supporting stabilizing material to shift or move about within said protective liner (col. 4 lines 50-55).

(0087) Response: EP018 teaches a separate cover 12a, 22a for the superstratum 12, 22 and a separate cover 14a, 24a the base layer 14, 24. Then each of these layers 12, 22, 14, 24, with their individual covers 12a, 22a, 14a, 24a, are enclosed in an outer casing 16, 26. EP018 (col.4 lines 50-55) discusses how the TWO covers may be sewn or attached together. There is no mention of a single liner, nor the importance of the close-fitting and tight manner of such single liner to prevent the shifting or moving about of the layers of padding within the liner as taught by Application 481. The purpose of the separate covers of EP018 is to maintain the shape of each layer.

(0088) For claims 17 & 24, EP018 as modified by 982 (emphasis on EP018) further teaches wherein said cushion has numerous overall geometric shape possibilities, such as but not limited to, square, round, rectangular, semi-circular, triangular or pie-shaped. See drawings of EP108.

(0089) Response: In classification 119, it is not uncommon for a pet cushion/bed to claim numerous overall geometric shape possibilities.

(0090) For claims 18 & 25, EP018 as modified by 982 (emphasis on EP018) further teaches wherein said cushion may be used by a domestic pet or human (col.1 lines 1-12).

(0091) Response: EP018 (col. 1 lines 1-12) speaks only to the use of the field of invention by dogs. There is no mention or teaching of the use of the cushion by humans. Furthermore, claiming a cushion to be used by a dog is not unique to either EP018 or Application 481. The classification 119 is filled with patents for cushions to be used by dogs.

(0092) For claim 20, it would have been obvious to one having ordinary skill in the art at the time the invention was made to manufacture the liner of EP018 as modified by 982 out of a close-weave fabric of sufficiently close weave to be waterproof and breathable.

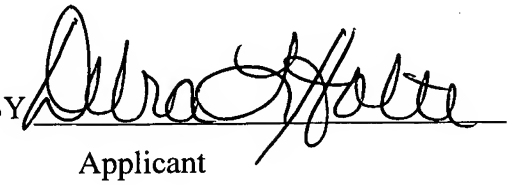
(0093) Response: The main function of EP018 is to provide a dual-layered cushion for the use by an animal, which accommodate the animal's bedding-down behavioral pattern (description paragraph 57-front page) Since EP018 is not concerned with the waterproof, breathable, flexible functions of a protective liner, EP018 does not teach a single liner enclosing both the superstratum 12, 22 and the base layer 14, 24 but rather separate covers 12a, 22a, 14a, 24a for each layer of superstratum and base layer. This is necessary since the superstratum "the shape is maintained only by the outer cover 12a" (col. 4 lines 41-43). The function of the covers of EP018 and the liner of Application 481 are different.

Should these covers of EP018 be made of the liquid-absorbing pad assembly taught by 982, it would not be obvious to use a close-weave fabric of sufficiently close weave to be waterproof and breathable. 982 teaches the waterproof layer comprises a polymeric sheet portion (claim 16) or the polymeric sheet portion is made of rubber (claim 17). Neither the polymeric sheet nor the rubber material is a woven material. Furthermore, the polymeric material or a rubber material is by nature waterproof and would have no need of a close-weave fabric of sufficiently close weave to be waterproof and breathable to create a waterproof material. Neither the polymeric material nor the rubber material is breathable. Even if the polymeric material or the rubber material of 982 was modified with a material a close-weave fabric of sufficiently close weave to be waterproof and breathable, it would not make either the polymeric material or the rubber material breathable. Modification of applying a material fabricated from a close-weave fabric of sufficiently close weave to be waterproof and breathable to 982 it would not make the liner breathable as taught by Application 481.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captions **"Version with markings to show changes made."**

Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

BY 

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Debra L. Holte

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